

**WEST****End of Result Set**

Generate Collection

Print

L14: Entry 1 of 1

File: USPT

Jun 21, 1977

DOCUMENT-IDENTIFIER: US 4030995 A

TITLE: Alkaline phosphatase isoenzyme determination

Brief Summary Paragraph Right (2):

The term "alkaline phosphatase" (abbreviated ALP), EC 3.1.3.1, is applied to a group of non-specific enzymes that hydrolyze monophosphoric esters of a variety of natural and synthetic compounds over a pH range of approximately 8.5 to 10.5. The different chemical species subsumed under the term alkaline phosphatase are referred to herein as isoenzymes of alkaline phosphatase. Alkaline phosphatase enzymes are found in many human tissues and in blood serum, and the isoenzyme composition of a given tissue is believed to be fixed genetically.

Brief Summary Paragraph Right (3):

Determination of ALP has long been a routine clinical procedure as an aid in diagnosing various disease states. It was early recognized that identification of isoenzymes of ALP in serum can be a useful diagnostic tool for differentiating disease states characterized by increased serum ALP levels. Heat inactivation was first used to differentiate osteogenic (bone) ALP from the isoenzyme originating in hepatic (liver) tissue. In recent years, more delicate techniques for separating ALP isoenzymes have revealed several isoenzymes, some of which are present in elevated quantities in human sera even in non-pathologic conditions. For example, a "placental" ALP isoenzyme is elevated in serum during the last trimester of pregnancy; the same isoenzyme appears to be elevated in the serum of patients suffering from certain carcinomas. Likewise, the bone isoenzyme is elevated in growing children, as well as in patients suffering from certain bone diseases. Determination of ALP isoenzymes is now, therefore, important not only as a diagnostic tool, but also as a tool for basic biological and medical research.

Brief Summary Paragraph Right (4):

In recent years, refinements in electrophoretic techniques have led to development of useful procedures for separating a number of ALP isoenzymes. In these procedures, a serum or tissue sample is applied to an appropriate support medium (such as agarose, polyacrylamide, cellulose acetate or starch gels) containing an appropriate electrolyte. When the gel is subjected to a differential electrical field, proteins within the sample acquire either a positive or negative charge and move toward the cathode or anode portion of the gel. Proteins in the sample are thus separated into more or less discrete fractions or bands. By the use of one or more reagents which react with the alkaline phosphatase bands to produce detectable products (such as colored products or products which have characteristic absorption bands in the ultraviolet spectrum), the bands of ALP isoenzymes are developed and identified.

Brief Summary Paragraph Right (17):

Application of samples to the support medium may be by such standard methods as cutting a slot in the gel to apply the untreated sample, inserting the untreated sample in pre-formed wells in the support medium, applying a mixture of gel and sample to a slot or well in the support medium, or applying the sample to the surface of the support medium, as with an overlay template. Addition of detergent to the sample is not necessary for the success of the process of the present invention, and in fact has no detectable effect in the preferred embodiments. The sample is preferably human serum or heparinized plasma. Plasma should be centrifuged to remove platelets. Alkaline phosphatase activity of samples stored frozen for extended periods can be

restored by incubation for six hours at 37.degree. C.

Brief Summary Paragraph Right (18):

A marker solution, containing known amounts of the isoenzymes expected to be found in the sample under test, is conveniently applied to the support medium at the same time as the test sample. The marker solution may be a previously assayed human serum sample, for example. For identifying placental ALP phenotypes, separate markers representing each phenotype are used..

Detailed Description Paragraph Right (8):

A rehydratable agarose film, as supplied by Beckman Instruments, Inc., is rehydrated in a beaker containing 480 ml. deionized water and 120 ml. surfactant solution (Reagent A). After rehydration, the gel is removed from solution and blotted gently. The gel is then immersed in Equilibration Buffer Solution (Reagent C) for thirty minutes. The gel is then blotted gently to eliminate excess moisture. Five microliters of serum to be tested and five microliters of marker solution (containing known quantities of ALP isoenzymes) are applied to the gel at aligned "start" positions, using the Beckman Instrument "Multiple Sample Applicator System" at "--0--" setting. After the samples have diffused into the gel, the samples are applied a second time. The gel is placed in a Bioware "Cool Pak" electrophoresis cell (Bioware, Inc., Wichita, Kansas) filled with the appropriate volume of cold Electrophoresis Buffer Solution (Reagent B). Care is taken to make appropriate contact with the buffer solution. A potential of one hundred fifty volts (DC) (15 volts per centimeter) is applied across the cell for 45 minutes.

**WEST****End of Result Set**☐ **Generate Collection** **Print**

L12: Entry 1 of 1

File: USPT

Jan 30, 1996

DOCUMENT-IDENTIFIER: US 5487889 A

TITLE: Bandage for continuous application of biologicals

Detailed Description Paragraph Right (55):

Plasmid pSV2NEO, which contains an ampicillin resistance gene, may be obtained from the American Type Culture Collection, Rockville, Md., the Accession No. is 37149. pSV2NEO is shown in FIG. 6. Plasmid pSV2NEO was simultaneously digested with 10 units each of the restriction endonucleases BamHI and EcoRI from New England Biolabs, in Beverly, Mass., in a standard restriction enzyme buffer of 10 mM Tris-HCl, pH 7.2 which contains 100 mMNaCl, 10 mM MgCl, 1 mMBeta-mercaptoethanol and 100 .mu.g/ml bovine serum albumin, for about 2 hours at 37.degree. C. The plasmid backbone was isolated by gel electrophoresis on a 1% agarose gel. The approximately 3.5 kilobase band was isolated and precipitated with ethanol.

Detailed Description Paragraph Right (65):

The potential growth hormone secreting cells were screened for secretion of growth hormone. The cells were grown until confluent in a 10 cm diameter dish (50 cm.sup.2) in normal growth media. The media was Dulbecco's Modified Eagle media in a 3 to 1 ratio with Ham's F12 and contained the supplements described above, and 80 ml fetal calf serum per liter. The cells were then shifted to serum-free growth media. After various periods of time (1-24 hours), the medium was collected, concentrated and fractionated on a 12% polyacrylamide gel. The fractionated proteins were blotted to nitrocellulose and incubated with anti-bGH primary antibody followed by secondary incubation with .sup.125 I-labelled protein A, from Amersham Inc. The bands were visualized by exposure on x-ray film (autoradiography).

Detailed Description Paragraph Right (69):

The engineered cells were seeded into the bandage and allowed to attach to the inside of the inside surface of the top membrane to form the bandage shown in FIG. 2. The inside of the bandage contained serum-free growth medium to maintain the engineered cells. The bandage was a 7 cm diameter circle that contained 1.times.10.sup.6 cells.

Detailed Description Paragraph Right (71):

For detection of growth factor released from the bandage into the medium, the engineered cells were shifted to serum-free defined medium and incubated for 1 hour to 10 days. At various times the medium was collected and concentrated/desalted using an Amicon centricon-10 filter. This filter retains molecules with molecular weights greater than 1000 daltons. The retained proteins were then washed with Tris-HCl, at pH 7.0 containing 0.1 mM EDTA, dissolved in electrophoresis sample buffer and electrophoresed on a 10% acrylamide gel. Immunological detection of the growth factor was both by immunoblotting with a bGH specific antibody and by a radioactively labelled .sup.125 I protein A from Amersham, Inc. FIG. 15 is an autoradiograph showing the release of bGH from the bandage over 24 hours time. The "std" is a standard containing 0.5 .mu.g of bGH.

**WEST**

Generate Collection

Print

L5: Entry 13 of 43

File: USPT

Sep 18, 2001

DOCUMENT-IDENTIFIER: US 6290952 B1

TITLE: Method of dephosphorylating an endotoxin in vivo with alkaline phosphatase

Brief Summary Text (13):

In U.S. Pat. No. 4,409,332 (1983) collagen sutures derivatized with alkaline phosphatase are described as reducing the inflammatory characteristics of collagen. The collagen induced inflammation is not an inflammatory reaction due to endotoxins, it is an inflammation that is generally caused by damage of tissue that has occurred, by the fact that collagen is a heterologous protein which is foreign to the body and by the fact that collagen always induces coagulation in vivo which can subsequently activate inflammatory cells in a number of manners. An inflammation due to infections of the wound is not likely as the authors themselves frequently state that they worked in a sterile environment, using sterile solutions. A person skilled in the art cannot derive from this cited patent publication how alkaline phosphatase coupled to collagen can inhibit the inflammation usually caused by collagen. A number of manners can however be postulated such as, for example by protection of antigens for cells of the specific immunoreaction, thereby prohibiting recognition or by binding positively charged mediators of the non-specific immune reaction as alkaline phosphatase contains negatively charged sugar groups. Another possibility is inhibition of the coagulation cascade by masking collagen or de-phosphorilation of mediators, such as ATP, ADP and platelet activating factor or by binding of positively charged mediators and cofactors.

Brief Summary Text (16):

WO 93/00935 describes that the possible role of the enzyme alkaline phosphatase in promoting the calcification of bone has been postulated for many years. However that the relevance of such in vitro mineralization studies to the situation in vivo has been questioned, particularly in view of the relatively high concentrations of phosphate esters used in the in vitro studies and also because the rate of hydrolysis of the phosphate esters and physiological pH levels would be expected to be too low to be relevant to the process of mineralization. In the cited patent application Beertsen et al. describe that combination of a biocompatible carrier material, preferably one which can mineralize to some degree itself, such as fibrillar collagen with a quantity of a phosphatase enzyme will promote mineralization. Preferably the combination of alkaline phosphatase with the carrier is brought about by incubating the carrier with the enzyme in the presence of a coupling agent capable of covalently bonding with the carrier and with the enzyme. Suitable coupling agents are described as biotinavidin, glutaraldehyde and 1-ethyl-3-(3-dimethyl-aminopropyl)carbodiimide HCl. A particularly preferred coupling agent is known as succinimidyl-s-acetyl-thioacetate (SATA) in combination with maleimido hexanoyl-N-hydroxysuccinimide (MHS) wherein the carrier is incubated with SATA and the enzyme with the MHS. The products of these two incubation processes are combined and allowed to react to produce an implant material. The cited document describes that the coupling of alkaline phosphatase to collagen improves the osteogenesis when such a complex is placed in situ of the wound. The alkaline phosphatase is used in combination with a product already known to stimulate bone formation. No description is given of use of alkaline phosphatase as such or as a derivative with a particular altered charge. It is pointed out that a derivative of alkaline phosphatase with fibrillar collagen has an increased positive charge in comparison to non-derivatized alkaline phosphatase. A derivative of alkaline phosphatase with fibrillar collagen is not suitable for systemic application as fibrillar collagen induces intravascular platelet activation leading

to embolisms. Therefore, a complex of fibrillar collagen and alkaline phosphatase could not be used in a method for treating osteoporosis or osteomalacia or any other bone defect which requires systemic application. It can only be used when immobilized in situ at the location of a wound.

**WEST**☐ **Generate Collection** **Print**

L9: Entry 797 of 808

File: DWPI

Oct 18, 1979

DERWENT-ACC-NO: 1979-77682B

DERWENT-WEEK: 197943

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Wound healing material - comprising coagulation factor XIII fixed to a structure e.g. gelatin, collagen, poly:glycolic acid or poly:lactic acid

INVENTOR: SUGITACHI, A; TAKAGI, K ; YABUSHITA, Y

PATENT-ASSIGNEE:

ASSIGNEE

CODE

UNITIKA LTD

NIRA

PRIORITY-DATA: 1978JP-0131116 (October 24, 1978), 1978JP-0043466 (April 12, 1978)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2914822 A	October 18, 1979		000	
DE 2914822 C	June 1, 1989		000	
FR 2422407 A	December 14, 1979		000	
GB 2023614 A	January 3, 1980		000	
GB 2023614 B	August 4, 1982		000	
JP 55058163 A	April 30, 1980		000	
JP 85054069 B	November 28, 1985		000	
JP 86059737 B	December 17, 1986		000	
US 4265233 A	May 5, 1981		000	

INT-CL (IPC): A61F 13/00; A61K 15/03; A61K 35/14; A61K 37/00; A61L 15/04; C07G 7/00

ABSTRACTED-PUB-NO: DE 2914822A

BASIC-ABSTRACT:

New material for the healing of wounds comprises a structure to which is fixed blood coagulation factor XIII. Pref. materials have both factor XIII and thrombin fixed to the structure, the thrombin and factor XIII pref. being in amts. sufficient to promote the formulation of stabilised fibrin. Calcium ions and a pharmaceutically active substance (pref. antiplasmins, antibiotics, antivirals, sulphonamides or anti-infective agents) are also advantageously fixed to the structure.

Provides long-acting preparations which utilize the effectiveness of factor XIII in stabilising fibrin formed in the wound. Stabilisation of fibrin prevents its breakdown resulting in renewed bleeding and retardation of wound healing.

TITLE-TER MS: WOUND HEAL MATERIAL COMPRISE COAGULATE FACTOR FIX STRUCTURE GELATIN  
COLLAGEN POLY GLYCOLIC ACID POLY LACTIC ACID

DERWENT-CLASS: A96 B04 D22 P34

CPI-CODES: A12-V03A; B04-B04A; B04-B04D; B04-C03D; B12-A07; B12-H04; B12-M10; D09-C;

**WEST**

Generate Collection

Print

L5: Entry 28 of 43

File: USPT

Nov 19, 1996

DOCUMENT-IDENTIFIER: US 5576294 A

TITLE: Human Kunitz-type protease inhibitor variant

Brief Summary Text (4):

Polymorphonuclear leukocytes (neutrophils or PMNs) and mononuclear phagocytes (monocytes) play an important part in tissue injury, infection, acute and chronic inflammation and wound healing. The cells migrate from the blood to the site of inflammation and, following appropriate stimulation, they release oxidant compounds (O.sub.2 .cndot., O.sub.2 --, H.sub.2 O.sub.2 and HOCl) as well as granules containing a variety of proteolytic enzymes. The secretory granules contain, i.a., alkaline phosphatase, metalloproteinases such as gelatinase and collagenase and serine proteases such as neutrophil elastase, cathepsin G and proteinase 3.

**WEST**☐ **Generate Collection** **Print**

L9: Entry 798 of 808

File: DWPI

Dec 14, 1978

DERWENT-ACC-NO: 1978-91569A

DERWENT-WEEK: 197851

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Transparent liq. gels e.g. of hydrophilic acrylic! polymer and gelatin -  
useful as wound dressings, esp. for burns and ulcers, and as cell culture media

INVENTOR: FISCHER, H; KICKHOEFEN, B ; VAUBEL, E

PATENT-ASSIGNEE:

ASSIGNEE

CODE

MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN

PLAC

PRIORITY-DATA: 1977DE-2725261 (June 3, 1977), 1978DE-2849570 (November 15, 1978)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2725261 A	December 14, 1978		000	
CA 1116519 A	January 19, 1982		000	
CH 637833 A	August 31, 1983		000	
DE 2725261 C	October 9, 1986		000	
DK 7802417 A	December 27, 1978		000	
FR 2392677 A	February 2, 1979		000	
GB 1594389 A	July 30, 1981		000	
JP 54005023 A	January 16, 1979		000	
JP 87036702 B	August 8, 1987		000	
SE 7806505 A	December 27, 1978		000	
US 4556056 A	December 3, 1985		000	

INT-CL (IPC): A61L 15/03; A61L 25/00; C08J 5/00; C12N 5/00

ABSTRACTED-PUB-NO: DE 2725261A

BASIC-ABSTRACT:

Transparent liq. dressing, esp. for wounds, comprises a hydrophilic organic transparent gel in sheet or tape form, swollen with an aq. soln. The dressing may be reinforced with a string or net-like reinforcing agent. The aq. soln. used to swell the gel may contain buffers, wound treatment agents, nutrients and/or growth agents.

Healing progress of the wound visually without removing the dressing. When it becomes necessary to change it, the old dressing can be removed easily without damage to the new tissue forming underneath. The gels are also useful as cell culture media.

Pref. the gel consists of a mixt. of a hydrophilic polymer (I) and  $\geq 1$  high molecular gel-forming substance. Esp. useful gels are comprised of a gel-forming polysaccharide and/or a protein or polypeptide, and a polymer of a hydrophilic



(meth)acrylic acid deriv. made by polymerisation in the presence of the gel-forming substance. Suitable gel-forming substances are e.g., agarose and gelatin.

TITLE-TERMS: TRANSPARENT LIQUID GEL HYDROPHILIC POLYACRYLIC POLYMER GELATIN USEFUL WOUND DRESS BURN ULCER CELL CULTURE MEDIUM

DERWENT-CLASS: A96 D22 P34

CPI-CODES: A12-V03A; D09-C;

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0011 0013 0030 0034 0204 0206 0218 0224 0231 1214 1279 1588 1974 1981  
1986 1989 2020 2028 2037 2066 2122 2215 2309 2382 2392 2432 2441 2500 2512 2522 2571  
2595 2706 2769 2815 0494 0501 0502 0585 0586 0620 0621 0627 0628

Multipunch Codes: 011 028 034 04- 040 074 076 077 081 086 134 147 198 228 231 240  
252 256 259 264 266 267 27& 271 273 302 308 309 336 40- 402 405 413 431 438 44& 470  
473 501 502 516 523 532 533 535 546 643 645 668 679 687 688 691 720 722 723 726 011  
028 034 04- 040 074 076 077 086 134 147 198 228 231 240 252 256 259 264 266 267 27&  
271 273 302 308 309 336 402 405 413 431 438 44& 470 473 501 502 516 523 532 533 535  
546 643 645 668 679 687 688 691 720 722 723 726

**WEST****End of Result Set**

Generate Collection

Print

L8: Entry 5 of 5

File: USPT

Dec 15, 1998

DOCUMENT-IDENTIFIER: US 5849322 A

TITLE: Compositions and methods for buccal delivery of pharmaceutical agents

Brief Summary Text (22):

These and other objects are accomplished by providing a system for transmucosally administering a drug to the oral cavity comprising an adhesive layer comprising a hydrophilic polymer having one surface adapted to contact a first tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an adjacent drug-containing layer comprising an effective amount of a drug and optionally an effective amount of a permeation enhancer, the drug-containing layer adapted to contact and be in drug transfer relationship with a mucosal tissue of the oral cavity when the adhesive layer contacts and adheres to the first tissue. Preferred permeation enhancers include cell envelope disordering compounds, solvents, steroidal detergents, bile salts, chelators, surfactants, non-surfactants, fatty acids, and mixtures thereof, with bile salt enhancers being more preferred. The drug is preferably a peptide drug, such as insulinotropic peptides, calcitonin, insulin, desmopressin, parathyroid hormone, and amylin, and their precursors, analogues, and fragments, wherein such precursors, analogues, and fragments have pharmacological activity. The hydrophilic polymer preferably comprises at least one member selected from the group consisting of hydroxypropyl cellulose, hydroxypropyl methylcellulose, hydroxyethylcellulose, ethylcellulose, carboxymethyl cellulose, dextran, gum-gum, polyvinyl pyrrolidone, pectins, starches, gelatin, casein, acrylic acid polymers, polymers of acrylic acid esters, acrylic acid copolymers, vinyl polymers, vinyl copolymers, polymers of vinyl alcohols, alkoxy polymers, polyethylene oxide polymers, polyethers, and mixtures thereof. A mixture of polyethylene oxide and polyacrylic acid is especially preferred. The adhesive layer additionally can contain one or more members selected from the group consisting of fillers, tableting excipients, lubricants, flavors, dyes, and the like, and the drug-containing layer additionally can contain one or more members selected from the group consisting of tableting excipients, fillers, flavors, taste-masking agents, dyes, stabilizers, enzyme inhibitors, lubricants, and the like. Preferably, the system is a bilayer tablet wherein the adhesive layer is in contact with and adheres to the gingiva and the drug-containing layer is in drug-transfer relationship with the buccal mucosa.

Detailed Description Text (37):

This example describes a double-blind, placebo-controlled, crossover comparison with random assignment to treatment sequence. Eight healthy volunteers were selected for this in vivo study of blood glucose, insulin, glucagon, and GLP-1(7-36)amide levels in response to receiving either a drug-containing bilayer tablet containing 400 .mu.g of GLP-1(7-36)amide or a placebo prepared according to Examples 1 and 2, respectively. Inclusion criteria for the volunteers were normal glucose tolerance, weight within 22 alkaline phosphatase, gamma-GT, SGOT, SGPT, cholesterol, and triglycerides), and blood pressure greater than 185 mmHg systolic and/or 90 mmHg diastolic.

**WEST**

Generate Collection

Print

L8: Entry 4 of 5

File: USPT

Jul 24, 2001

DOCUMENT-IDENTIFIER: US 6265544 B1

TITLE: Adipocyte-specific protein homologs

Detailed Description Text (174):

Approximately 10-12 days post-transfection, one 150 mm culture dish of methotrexate resistant colonies was chosen from each transfection, the media aspirated, the plates washed with 10 ml serum-free ESTEP 2 media (668.7g/50L DMEM (Gibco), 5.5 g/50L pyruvic acid, sodium salt 96% (Mallinckrodt), 185.0 g/SOL NaHCO<sub>3</sub> (Mallinckrodt), 5.0 mg/ml, 25 ml/50L insulin, 10.0 mg/ml and 25 ml/50 L transferrin). The wash media was aspirated and replaced with 5 ml serum-free ESTEP 2. Sterile Teflon mesh (Spectrum Medical Industries, Los Angeles, Calif.) pre-soaked in serum-free ESTEP 2 was then placed over the cells. A sterile nitrocellulose filter pre-soaked in serum-free ESTEP 2 was then placed over the mesh. Orientation marks on the nitrocellulose were transferred to the culture dish. The plates were then incubated for 5-6 hours in a 37.degree. C., 5% CO<sub>2</sub> incubator. Following incubation, the filter was removed, and the media aspirated and replaced with DMEM/5% FBS, 1.times.PSN (Gibco BRL) media. The filter was then placed into a sealable bag containing 50 ml buffer (25 mM Tris, 25 mM glycine, 5 mM .beta.-mercaptoethanol) and incubated in a 65.degree. C. water bath for 10 minutes. The filters were blocked in 10% nonfat dry milk/Western A buffer (Western A: 50 mM Tris pH 7.4, 5 mM EDTA, 0.05% NP-40, 150 mM NaCl and 0.25% gelatin) for 15 minutes at room temperature on a rotating shaker. The filter was then incubated with an anti-Glu-Glu antibody-HRP conjugate at a 1:1000 dilution in 2.5w nonfat dry milk/Western A buffer (Western A: 50 mM Tris pH 7.4, 5 mM EDTA, 0.05% NP-40, 150 mM NaCl and 0.25% gelatin) overnight at 4.degree. C. on a rotating shaker. The filter was then washed three times at room temperature in PBS plus 0.1% Tween 20, 5-15 minutes per wash. The filter was developed with ECL reagent (Amersham Corp., Arlington Heights, Ill.) according the manufacturer's directions and exposed to film (Hyperfilm ECL, Amersham) for approximately 5 minutes.

Detailed Description Text (228):

To confirm the above results a second screen was done as above with the following modifications. Three groups; a) untreated and fasted, b) AdV-null and fasted, c) AdV-zsig37-CEE and fasted, containing 20 C57B16/J, 10 each male and female, were tested. The mice were fasted overnight and 100 .mu.l serum was collected to establish a basal level for the following parameters: fasting glucose, TP, alkaline phosphatase, cholesterol, triglycerides, free fatty acids and insulin. Body weights were taken three times a week. On day 0, mice were injected into the lateral tail vein with 0.1 ml of the appropriate virus solution. Blood was collected on day 17 following an overnight fast. After 3 weeks the mice were sacrificed and all blood collected. A portion of the blood was mixed with EDTA to look at CBC's and the remainder will be re-assayed and screened as described above. Organs were collected and the carcass saved for histopathology.

**WEST**

Generate Collection

Print

L8: Entry 3 of 5

File: USPT

Sep 10, 2002

DOCUMENT-IDENTIFIER: US 6448221 B1

TITLE: Methods of promoting blood flow within the vasculature of a mammal

Detailed Description Text (76):

Approximately 10-12 days post-transfection, one 150 mm culture dish of methotrexate resistant colonies was chosen from each transfection, the media aspirated, the plates washed with 10 ml serum-free ESTEP 2 media (668.7 g/50 L DMEM (Gibco), 5.5 g/50 L pyruvic acid, sodium salt 96% (Mallinckrodt), 185.0 g/50 L NaHCO<sub>3</sub> (Mallinckrodt), 5.0 mg/ml, 25 ml/50 L insulin, 10.0 mg/ml and 25 ml/50 L transferrin). The wash media was aspirated and replaced with 5 ml serum-free ESTEP 2. Sterile Teflon mesh (Spectrum Medical Industries, Los Angeles, Calif.) pre-soaked in serum-free ESTEP 2 was then placed over the cells. A sterile nitrocellulose filter pre-soaked in serum-free ESTEP 2 was then placed over the mesh. Orientation marks on the nitrocellulose were transferred to the culture dish. The plates were then incubated for 5-6 hours in a 37.degree. C., 5% CO<sub>2</sub> incubator. Following incubation, the filter was removed, and the media aspirated and replaced with DMEM/5% FBS, 1.times.PSN (Gibco BRL) media. The filter was then placed into a sealable bag containing 50 ml buffer (25 mM Tris, 25 mM glycine, 5 mM .mu.-mercaptoethanol) and incubated in a 65.degree. C. water bath for 10 minutes. The filters were blocked in 10% nonfat dry milk/Western A buffer (Western A: 5mM Tris pH 7.4, 5 mM EDTA, 0.05% NP-40, 150 mM NaCl and 0.25% gelatin) for 15 minutes at room temperature on a rotating shaker. The filter was then incubated with an anti-Glu-Glu antibody-HRP conjugate at a 1:1000 dilution in 2.5% nonfat dry milk/Western A buffer (Western A: 50 mM Tris pH 7.4, 5 mM EDTA, 0.05% NP-40, 150 mM NaCl and 0.25% gelatin) overnight at 4.degree. C. on a rotating shaker. The filter was then washed three times at room temperature in PBS plus 0.1% Tween 20, 5-15 minutes per wash. The filter was developed with ECL reagent (Amersham Corp., Arlington Heights, Ill.) according the manufacturer's directions and exposed to film (Hyperfilm ECL, Amersham) for approximately 5 minutes.

Detailed Description Text (120):

To confirm the above results a second screen was done as above with the following modifications. Three groups; a) untreated and fasted, b) AdV-null and fasted, c) AdV-zsig37-CEE and fasted, containing 20 C57B16/J, 10 each male and female, were tested. The mice were fasted overnight and 100 .mu.l serum was collected to establish a basal level for the following parameters: fasting glucose, TP, alkaline phosphatase, cholesterol, triglycerides, free fatty acids and insulin. Body weights were taken three times a week. On day 0, mice were injected into the lateral tail vein with 0.1 ml of the appropriate virus solution. Blood was collected on day 17 following an overnight fast. After 3 weeks the mice were sacrificed and all blood collected. A portion of the blood was mixed with EDTA to look at CBC's and the remainder will be re-assayed and screened as described above. Organs were collected and the carcass saved for histopathology.

**WEST****End of Result Set**

Generate Collection

Print

L4: Entry 7 of 7

File: USPT

Sep 20, 1994

DOCUMENT-IDENTIFIER: US 5348852 A

TITLE: Diagnostic and therapeutic compositions

Detailed Description Text (4):

As will be understood, the labile organic substrate can be any one of many types well known and often used in diagnostic, therapeutic and other similar disciplines. For example, representative labile substrates include biological materials such as enzymes, cells and their components, hormones, blood proteins, etc., as well as pharmaceuticals and drugs including preparations of naturally-occurring materials and/or synthetic materials. As typical enzymes, there may be mentioned glutamic-oxaloacetate transaminase, glutamic-pyruvate transaminase, lactic dehydrogenase, creatine phosphokinase, acid phosphatases, amylases, alkaline phosphatases, glutamyl transpeptidases, isocitric dehydrogenase, alpha-hydroxybutyric dehydrogenase, lipase, alanine amino transferase, esterases, aspartate amino transferase, malic dehydrogenase, glucose-6-phosphate dehydrogenase, peroxidase, cholesterol oxidase, cholesterol esterase, uricase, urease, glycerol kinase and the like. Representative cells included in the applicant's work thus far have been red and white blood cells. Typical therapeutic substrates can include pharmaceuticals, enzymes, hormones, etc. having therapeutic value, including for example substances such as tissue plasminogen activator, insulin, human growth hormone, etc. In general, these and other similar substrates have proven to be relatively labile (i.e. sensitive to degradation, as by oxidation or the action of free radicals), especially in aqueous or partly aqueous mediums often encountered in therapeutic or diagnostic compositions. Particularly preferred substrates based on work to date are enzymes such as creative phosphoslainase (CPK) and lactate dehydrogenase (LDH), as well as uric acid, blood urea nitrogen (BUN), glucose, cholesterol, triglycerides, bilirubin, and red and white blood cells. Further, in one preferred mode of carrying out the invention, the applicant's discoveries provide dramatic improvements to serum controls. When such a control is shielded from light, the cold water fish gelatin highly stabilizes bilirubin, which has been particularly troublesome and long recognized as a major unstable component of serum controls.

**WEST**

Generate Collection

Print

L4: Entry 6 of 7

File: USPT

Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6114168 A

TITLE: Active retinoic acid-free culture medium for chicken embryonic stem cells

Detailed Description Text (28):

The cells are inoculated onto either untreated or gelatin-treated dishes in complete ESA medium with growth factors aSCF (avian stem cell factor), bFGF (basic fibroblast growth factor), IGF-1 (insulin-like growth factor-1) and LIF (leukemia inhibitory factor). The ARMA antibody is added in the proportion of 1 .mu.g/ml final. The cells and colonies which are positive for alkaline phosphatase activity (AP+) are counted after 4 d of culture.

**WEST**

Generate Collection

Print

L4: Entry 5 of 7

File: USPT

Oct 1, 2002

DOCUMENT-IDENTIFIER: US 6458387 B1

TITLE: Sustained release microspheres

Detailed Description Paragraph Table (1):

TABLE 1 Proteins PROTEINS THERAPEUTIC PROTEINS CARRIER PROTEINS OR OR PEPTIDES MOLECULES OR MOLECULES Albumins (preferably, human serum Insulin; human growth albumin); HAS; BSA; IgG; IgM; insulin; hormone; GCSF; GMCSF; hGH; lysozyme; alpha-lactoglobulin; LHRH; VEGF; basic basic fibroblast growth factor; VEGF; fibroblast growth factor chymotrypsin; trypsin; carbonic (bFGF); DNA; RNA; anhydrase; ovalbumin; phosphorylase b; asparaginase; tPA; urokinase; alkaline phosphatase; beta-galactosidase; streptokinase; interferon; fibrinogen; poly-l-lysine; DNA; glucagon; ACTH; oxytocin; immunoglobulins (e.g., antibodies); secretin; vasopressin; and casein; collagen; soy protein; and gelatin. levothyroxin.

**WEST**

Generate Collection

Print

L4: Entry 4 of 7

File: USPT

Dec 31, 2002

DOCUMENT-IDENTIFIER: US 6500668 B2

TITLE: Culture medium for avian embryonic cells

Detailed Description Text (24):

The cells are inoculated onto either untreated or gelatin-treated dishes in complete ESA medium with growth factors aSCF (avian stem cell factor), bFGF (basic fibroblast growth factor) , IGF-1 (insulin-like growth factor-1) and LIF (leukemia inhibitory factor). The ARMA antibody is added in the proportion of 1 .mu.g/ml final. The cells and colonies which are positive for alkaline phosphatase activity (AP+) are counted after 4 d of culture.



**WEST****End of Result Set**

Generate Collection

Print

L4: Entry 54 of 54

File: DWPI

*cited  
of  
interest.*  
Mar 20 1995

DERWENT-ACC-NO: 1995-319341

DERWENT-WEEK: 199551

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Prepn. of compsn. for treating purulent- necrotic wounds - by immobilisation of enzyme compsn. by treatment of chitosan soln. with glutaric aldehyde soln.

INVENTOR: ARTYUKHOV, A A; GAFUROV YU, M ; VASILENKO, S K

PATENT-ASSIGNEE:

ASSIGNEE

AS USSR FAR E PACIFIC OCEAN BIOORG INST

CODE

ASPAR

*Cite  
in  
action  
if*

PRIORITY-DATA: 1990SU-4848928 (April 20, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1814764 A3	March 20, 1995		004	A61K031/557

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
SU 1814764A3	April 20, 1990	1990SU-4848928	

INT-CL (IPC): A61 K 31/557; A61 K 47/48

ABSTRACTED-PUB-NO: SU 1814764A

BASIC-ABSTRACT:

Prepn. of a compsn. for treating purulent-necrotic wounds involves immobilisation of an enzyme compsn. by treatment with a 2% chitosan gel with a soln. of glutaric aldehyde in phosphate buffer, pH 7.5 in 1:1 ratio and held at 18-20deg.C for 30 min.. The compsn. then passes through a gel of Kamchatka crab extract (KCE) contg. an enzyme complex 100-120 units/mg protein DNA-ase, 0.05-0.07 units/mg alkaline phosphatase 0.05-0.06 units/mg type 1 phosphodiesterase and 120 units/mg protease, previously dissolved in phosphate buffer, pH 7.5, chitosan to extract ratio 1:(25-5) (by wt.).

USE - The compsn. is useful in the treatment of heat burns, trophic ulcers and infected wounds.

ADVANTAGE - The compsn. has a therapeutic effect.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: PREPARATION COMPOSITION TREAT PURULENT NECROSIS WOUND IMMOBILISE ENZYME COMPOSITION TREAT CHITOSAN SOLUTION GLUTARIC ALDEHYDE SOLUTION

DERWENT-CLASS: B05

**WEST**

Generate Collection

Print

L9: Entry 795 of 808

File: DWPI

Sep 10, 1981

DERWENT-ACC-NO: 1981-68088D

DERWENT-WEEK: 198138

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Soft gelatin capsules with wound-healing effect for local application -  
contg. aq/ soln. of chlorhexidine and allantoin thickened with polyethylene  
glycol(s)

INVENTOR: HOFACKER, E

PATENT-ASSIGNEE:

ASSIGNEE

CODE

HOFACKER E

HOFAI

PRIORITY-DATA: 1980DE-3007226 (February 27, 1980)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 3007226 A	September 10, 1981		006	

INT-CL (IPC): A61K 31/41

ABSTRACTED-PUB-NO: DE 3007226A

BASIC-ABSTRACT:

New soft gelatin medicinal capsules contain an aq soln, thickened with polyethylene glycols, of a mixture of chlorhexidine and allantoin, as well as polyols, and the capsule wall consists of phargelatin, ceutical, ma softeners and opt, preservatives, pigments and/or dyes.

Chlorhexidine and allantoin exert a synergistic effect on healing processes. The new capsules are intended for insertion in body cavities, where the active components are gradually released to exert a local wound-healing effect.

The capsules have practically unlimited shelf life under normal storage conditions, but local tolerance is good and good solubility and prolonged action properties are retained.

TITLE-TERMS: SOFT GELATIN CAPSULE WOUND HEAL EFFECT LOCAL APPLY CONTAIN AQUEOUS  
SOLUTION CHLORHEXIDINE ALLANTOIN THICKEN POLYETHYLENE GLYCOL

DERWENT-CLASS: A96 B05 B07

CPI-CODES: A03-C01; A05-H03; A12-V01; A12-W05; B04-B04A; B04-C03C; B07-D09; B10-A17;  
B10-E04C; B11-C04A; B12-A01; B12-A02; B12-A07; B12-C09; B12-M10; B12-M11;

CHEMICAL-CODES:

Chemical Indexing M1 \*01\*

Fragmentation Code

H4 H402 H482 H5 H589 H8 M280 M312 M323 M332

WEST



Generate Collection

Print

L21: Entry 20 of 21

File: JPAB

Dec 8, 1986

103 Sec.

PUB-NO: JP361277626A

DOCUMENT-IDENTIFIER: JP 61277626 A

TITLE: PLACENTA EXTRACT CONTAINING SUPEROXIDE DISMUTASE IN HIGH CONCENTRATION AND PRODUCTION THEREOF

PUBN-DATE: December 8, 1986

## INVENTOR-INFORMATION:

NAME

COUNTRY

SUGIURA, MAMORU

KAWASAKI, AKIO

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

KK SUGIURA SHINYAKU KAIHATSU KENKYUSHO

Placenta  
Source  
for  
enzyme

APPL-NO: JP60117919

APPL-DATE: May 31, 1985

INT-CL (IPC): A61K 35/50; A61K 37/50

## ABSTRACT:

PURPOSE: To provide a placenta extract containing superoxide dismutase in high concentration.

CONSTITUTION: Fresh placenta of mammal such as human, bovine, swine, etc., is used as a raw material, washed with cold physiological saline water, cut under cooling or crushed in frozen state, and homogenized. The product is heated in a hot bath of 80°C, and cooled with ice when the product is heated to 45~65°C. After ice-cooling, it is centrifuged at 8,000rpm for 20min at 4°C. The collected supernatant liquid is optionally subjected to the column chromatography with CM-cellulose, etc., to obtain a placenta extract containing SOD in high concentration. The extract contains >100 unit of SOD per 1ml, and the concentration of alkaline phosphatase in the extract is >100 King Armstrong unit. Addition of 0.01~0.05% paraben to the extract is effective to suppress the putrefaction, clouding, etc., of the extract.

COPYRIGHT: (C)1986,JPO&amp;Japio

**WEST**☐ **Generate Collection** **Print**

L8: Entry 1285 of 1315

File: DWPI

Sep 3, 1992

DERWENT-ACC-NO: 1992-315933

DERWENT-WEEK: 199238

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Promoting accelerated wound healing - comprises topical or parenteral administration of granulocyte-, or granulocyte macrophage - colony stimulating factor, pref. in admixture with e.g. interleukin

INVENTOR: ALTROCK, B W; PIERCE, G

PATENT-ASSIGNEE:

ASSIGNEE

CODE

AMGEN

AMGEN

PRIORITY-DATA: 1992US-0821498 (January 21, 1992), 1991US-0659780 (February 22, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9214480 A1	September 3, 1992	E	046	A61K037/02
AU 9214623 A	September 15, 1992		000	A61K037/02
EP 526630 A1	February 10, 1993	E	046	A61K037/02
EP 526630 A4	August 11, 1993		000	A61K037/02
FI 9204778 A	October 21, 1992		000	A61K000/00
JP 05506673 W	September 30, 1993		015	A61K037/02
NO 9204073 A	October 21, 1992		000	A61K037/00
PT 100152 A	May 31, 1993		000	C12N015/00
ZA 9201237 A	November 25, 1992		046	A61K000/00

DESIGNATED-STATES: AU CA FI JP KR NO AT BE CH DE DK ES FR GB GR IT LU MC NL SE AT BE  
CH DE DK ES FR GB GR IT LI LU MC NL SE

CITED-DOCUMENTS:7.Jnl.Ref; US 4810643 ; WO 9000060 ; WO 9005755 ; WO 9008554 ; WO 9011301

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
WO 9214480A1	February 19, 1992	1992WO-US01245	
AU 9214623A	February 19, 1992	1992AU-0014623	
AU 9214623A	February 19, 1992	1992WO-US01245	
AU 9214623A		WO 9214480	Based on
EP 526630A1	February 19, 1992	1992EP-0907847	
EP 526630A1	February 19, 1992	1992WO-US01245	
EP 526630A1		WO 9214480	Based on
EP 526630A4		1992EP-0907847	
FI 9204778A	February 19, 1992	1992WO-US01245	
FI 9204778A	October 21, 1992	1992FI-0004778	
JP 05506673W	February 19, 1992	1992JP-0507313	
JP 05506673W	February 19, 1992	1992WO-US01245	
JP 05506673W		WO 9214480	Based on
NO 9204073A	February 19, 1992	1992WO-US01245	
NO 9204073A	October 21, 1992	1992NO-0004073	
PT 100152A	February 21, 1992	1992PT-0100152	
ZA 9201237A	February 20, 1992	1992ZA-0001237	

INT-CL (IPC): A61K 0/00; A61K 37/00; A61K 37/02; A61K 37/66; C12N 15/00

ABSTRACTED-PUB-NO: WO 9214480A

BASIC-ABSTRACT:

A method for promoting accelerated wound healing in an injured patient comprises administering, topically or parenterally, an effective amt. of G-CSF or GM-CSF.

Pref. the CSF is made by recombinant methods, utilising prokaryotic or eukaryotic cells, e.g. E.coli. Pref. the CSF is used in admixture with at least one other protein, selected from recombinant EGF, FGF, G-CSF, GM-CSF, IGF-I, IGF-II, insulin, an interferon, an interleukin, KGF, PO-ECGF, PDGF, SCF, TGF-alpha or TGF-beta. The interferon is alpha, beta or gamma-interferon. The interleukin is IL-1, -2, -3, -4, -5, -6, -7, -8, -9 or -10. The admixture is administered in a formulation selected from collagen-based creams, films, microcapsules, powders, lyoluronic acid or other glycosaminoglycans, creams, foams, suture material or wound dressings.

ADVANTAGE - Wounds which heal normally as well as those which resist healing can be treated with G-CSF and Gm-CSF effectively, allowing enhanced healing. Mechanical, thermal, acute, chronic, infected or sterile wounds can be healed.

CHOSEN-DRAWING: Dwg.0/3

TITLE-TERMS: PROMOTE ACCELERATE WOUND HEAL COMPRISE TOPICAL PARENTERAL ADMINISTER GRANULOCYTE GRANULOCYTE MACROPHAGE COLONY STIMULATING FACTOR PREFER ADMIXED INTERLEUKIN

DERWENT-CLASS: B04 D16

CPI-CODES: B04-B04J; B12-A07; D09-C04B;

CHEMICAL-CODES:

Chemical Indexing M1 \*01\*

Fragmentation Code

M423 M430 M781 M782 M903 P942 Q233 V600 V641

Chemical Indexing M1 \*02\*

Fragmentation Code

M423 M430 M782 M903 M904 P942 Q233 V752 V902 V917